From: "Saric, James" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE:GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1563015DBEEE49A1AEA479C55929F0D1-JSARIC>

To: Canar

John;Roth Charles

CC: John <Kern:Bucholtz>

<u>"Paul <"</u>

"\(DEQ\)>" Date: 4/10/2013 8:45:42 AM

Subject: RE: Kalamazoo SWACS and Fish Trends

No problem. Let's just make sure the three of us get together and you should call John Kern after 4/17 to the download. I don't pretend to be a stats guy and want to make sure you guys all believe whatever approach(es) we use for calculating SWACs are the best. I would like to use as much data as possible including the more recent sampling events, however, I don't want to use the data that biases the SWACs artificially low. I do like the idea of using multiple approaches or putting bounds on the SWACs and having those be presented in the documents. I think GPs concern is there are a few sections of the Kalamazoo River in Area 1 where one data point may be significantly impacting SWAC. Also, I believe, but have not confirmed, that GP is defaulting to 0.33 even for non-detects of PCB in the SWAC calculations. With a sediment SWAC preliminary remediation goal of 0.33 this could be problematic.

Thanks and talk soon.

Jim

From: Canar, John

Sent: Tuesday, April 09, 2013 7:12 PM To: Saric, James; Roth, Charles Cc: John Kern: Bucholtz, Paul (DEO)

Subject: RE: Kalamazoo SWACS and Fish Trends

Dear Jim,

We are happy to work on the SWAC and fish trends stuff.

I am pretty sure that Chuck and I will not be able to make a call on 4/17. (We are scheduled to do an elevation survey on a portion of Portage Creek that week.) But I am sure we can bet up-to-speed following that call.

John

From: Saric, James

Sent: Tuesday, April 09, 2013 4:33 PM
To: Canar, John; Roth, Charles
Cc: John Kern; Bucholtz, Paul (DEQ)
Subject: Kalamazoo SWACS and Fish Trends

John and Chuck,

We just had a conference call with Georgia-Pacific and their new contractor AMEC regarding SWACs and fish trends. A couple names you may be hearing from in the future are Garrett Bondy, the AMEC project manager and Steve Ellis their stats guy. Anyhow, it appears that AMEC concurs with the idea of eliminating step-out sampling, but wants to get a better idea of what data is being used in the SWAC calculations. So, it is my understanding that they want to propose another boot-strap method using some of the data John Kern used in his recent SWAC analysis for comparison. They are going to send that to everyone early next week. We are planning on having a conference call to discuss this on wed 4/17 most likely in the afternoon, as Steve Ellis lives in Seattle. So, be on the lookout for this submittal and let me know if you can make the call on 4/17. John Kern, if you need to further expound on this and/or talk directly to John and Chuck go ahead.

Also, AMEC is going to take a closer look at the fish trend analysis and calculations John performed. They agree that lipid needs to be considered, but I think they want to make sure that all fish sizes are represented and realistically they haven't yet had a chance to get deep into the data. So, I expect to hear more about fish next week as well.

Anyhow, I will need you both to be available as much as possible the next few weeks to participate on this SWAC and fish trend working group to try and resolve these issues and develop an acceptable method(s) for calculating SWACs as well as fish trends.

Jim